



Dart Hawkesbury
1270 Aberdeen St Hawkesbury, ON K6A 1K7 Canada
Tel (613) 632-5200
Fax 613 632-5246

Purchasing Receipts

PO No	Supplier	Line Item No	Rel No	Terms	Purchased Item	Description	For Part No	Project	Equipment ID	Order Qty	Due Date	Received Quantity	Accounting Job No	Container No	Status	Receive Date	Price/Unit	Aging Days	Past Due	Total	Supplier Name	
PO040839	MES002-VC	1	1	Net 30	M304B0.500X6.000	304 Bar 0.500 X 6.000" MATERIAL: AISI 304/316 SS BAR OR AISI 304/316 SS PLATE AS PER ASTM A276 OR ASTM A240 NOTE: AISI 303 NOT ACCEPTABLE receive ft				6	9/20/2018	6		S114510	Stock	9/17/2018	\$ 37.92 / ft	11		\$227.52	Metaux Solutions	
		2			M303R0.625	303 Round Bar 0.625" MATERIAL: AISI 303 SS ROUND BAR AS PER ASTM A582 NOTE: 304/316 NOT ACCEPTABLE receive ft				12	9/6/2018	12		S108976	Stock	9/10/2018	\$ 6.10 / ft	18		\$73.20	Metaux Solutions	
		3			M6061T6B1.000X02.000	6061-T6 Bar 1.00 X 2.00 : MATERIAL: 6061- T6/T651/T6510/T6511/T62 ALUMINUM BAR PER QQ-A-225/8 OR AMS-QQ- A-225/8 OR AMS 4117/4128/4115/4116 OR QQ-A-200/8 OR AMS-QQ- A-200/8 OR AMS 4160 OR ASTM B211 OR ASTM B221 receive ft				40		36		S108977	Stock	9/10/2018	\$ 11.90 / ft	18		\$428.40	Metaux Solutions	
		4			M6061T6B2.500X01.500	6061-T6 Bar 2.50 X 1.50 : MATERIAL: 6061- T6/T651/T6510/T6511/T62 ALUMINUM BAR PER QQ-A-225/8 OR AMS-QQ- A-225/8 OR AMS 4117/4128/4115/4116 OR QQ-A-200/8 OR AMS-QQ- A-200/8 OR AMS 4160 OR ASTM B211 OR ASTM B221 receive ft				12		11		S108978	Stock	9/10/2018	\$ 17.80 / ft	18		\$204.22	Metaux Solutions	
		5			MT-O1-R2.500	AISI O1 Tool Steel Round Bar 2.500" DIA : Material: AISI O1 TOOL STEEL ROUND BAR DIN 1.2510 or B.S. BO 1 or SAE J437 or SAE J438 or UNS T31501 or ASTM A681				3			3		S108979	Stock	9/10/2018	\$ 61.20 / ft	18		\$183.60	Metaux Solutions
Total:											73			68							\$858.19	

Plex 9/28/2018 1:15 PM dart Tollis Andrew



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER **PO040839**

Supplier: MES002-VC
Metaux Solutions
2625 boul Jacques-Cartier Est
Longueuil
QC
J4N 1L7 Canada
Phone: 800 558 8858
Fax: 514 633 8044

PO No: PO040839

PO Date: 8/24/18

Due Date: 8/31/18

Purchase Order

Revision:

Revision Date:

Ship-To Contact: Lavoie, Chantal
clavoie@dartaero.com

REVISED

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

Via: Ground

Pymt Terms: Net 30

Freight Terms:

Special Comments: bid 28604

Items

Line Item	Job	Part	Supplier Part No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1 ✓ AT		M304B0.500X6.000	SF1264	304 Bar 0.500 X 6.000" : MATERIAL: AISI 304/316 SS BAR OR AISI 304/316 SS PLATE AS PER ASTM A276 OR ASTM A240 NOTE: AISI 303 NOT ACCEPTABLE receive ft	Firmed	-	8/31/18	6 ft	0 ft	6 ft	\$37.92/ft	\$227.52
2 ✓ AT		M303R0.625		303 Round Bar 0.625" : MATERIAL: AISI 303 SS ROUND BAR AS PER ASTM A582 NOTE: 304/316 NOT ACCEPTABLE receive ft	Firmed	-	8/31/18	12 ft	0 ft	12 ft	\$6.10/ft	\$73.20
3 ✓ AT		M6061T6B1.000X02.000		6061-T6 Bar 1.00 X 2.00 : MATERIAL: 6061- T6/T651/T6510/T6511/T62 ALUMINUM BAR PER QQ-A-225/8 OR AMS-QQ- A-225/8 OR AMS 4117/4128/4115/4116 OR QQ-A-200/8 OR AMS-QQ- A-200/8 OR AMS 4160 OR ASTM B211 OR ASTM B221 receive ft	Firmed	-	8/31/18	40 ft	0 ft	40 ft	\$11.90/ft	\$476.00
Line Item Note cut in section of 10 ft												
4 ✓ AT		M6061T6B2.500X01.500	AF112212	6061-T6 Bar 2.50 X 1.50 : MATERIAL: 6061- T6/T651/T6510/T6511/T62 ALUMINUM BAR PER QQ-A-225/8 OR AMS-QQ- A-225/8 OR AMS 4117/4128/4115/4116 OR QQ-A-200/8 OR AMS-QQ- A-200/8 OR AMS 4160 OR ASTM B211 OR ASTM B221 receive ft	Firmed	-	8/31/18	12 ft	0 ft	12 ft	\$17.80/ft	\$213.60

Items												
Line Item	Job	Part	Supplier Part No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
5		MT-O1-R2.500	TR21201	AISI O1 Tool Steel Round Bar 2.500" DIA : Material: AISI O1 TOOL STEEL ROUND BAR DIN 1.2510 or B.S. BO 1 or SAE J437 or SAE J438 or UNS T31501 or ASTM A681	Firmed	-	8/31/18	3 ft	0 ft	3 ft	\$61.20/ft	\$183.60
6		MT-O1-R3.000	TR301	AISI O1 Tool Steel Round Bar 3.000" DIA. : Material: AISI O1 TOOL STEEL ROUND BAR DIN 1.2510 or B.S. BO 1 or SAE J437 or SAE J438 or UNS T31501 or ASTM A681	Firmed	-	8/31/18	3 ft	0 ft	3 ft	\$72.53333/ft	\$217.60
Grand Total:											\$1,391.52	

Order Notes

Procurement Quality Clauses

- A005 right of entry
- A012 chemical and physical test report
- A016 personnel qualification
- A017 raw material identification (as applicable)
- A026 certification of material conformance
- A041 quality management system
- A042 dart notification by supplier
- A043 retention of quality documents
- A048 counterfeit parts avoidance, detection, mitigation and disposition program
- A049 supplier awareness

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Plex 8/27/18 10:11 AM dart.lavoie.chantal



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER **PO040839**

Supplier: MES002-VC
Metaux Solutions
2625 boul Jacques-Cartier Est
Longueuil
QC
J4N 1L7 Canada
Phone: 800 558 8858
Fax: 514 633 8044

PO No: PO040839

PO Date: 8/24/18

Due Date: 8/31/18

Purchase Order

Revision:

Revision Date:

Ship-To Contact: Lavoie, Chantal
clavoie@dartaero.com

E-MAILED
AUG 24 2018

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

Via: Ground

Pymt Terms: Net 30

Freight Terms:

Special Comments: bid 28604

Items

Line Item	Job	Part	Supplier Part No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1		M304B0.500X6.000	SF1264	304 Bar 0.500 X 6.000" : MATERIAL: AISI 304/316 SS BAR OR AISI 304/316 SS PLATE AS PER ASTM A276 OR ASTM A240 NOTE: AISI 303 NOT ACCEPTABLE receive ft	Firmed	-	8/31/18	6 ft	0 ft	6 ft	\$37.92/ft	\$227.52
2		M303R0.625		303 Round Bar 0.625" : MATERIAL: AISI 303 SS ROUND BAR AS PER ASTM A582 NOTE: 304/316 NOT ACCEPTABLE receive ft	Firmed	-	8/31/18	12 ft	0 ft	12 ft	\$6.10/ft	\$73.20
3		M6061T6B1.000X02.000		6061-T6 Bar 1.00 X 2.00 : MATERIAL: 6061- T6/T651/T6510/T6511/T62 ALUMINUM BAR PER QQ-A-225/8 OR AMS-QQ- A-225/8 OR AMS 4117/4128/4115/4116 OR QQ-A-200/8 OR AMS-QQ- A-200/8 OR AMS 4160 OR ASTM B211 OR ASTM B221 receive ft	Firmed	-	8/31/18	36 ft	0 ft	36 ft	\$9.60/ft	\$345.60
4		M6061T6B2.500X01.500	AF112212	6061-T6 Bar 2.50 X 1.50 : MATERIAL: 6061- T6/T651/T6510/T6511/T62 ALUMINUM BAR PER QQ-A-225/8 OR AMS-QQ- A-225/8 OR AMS 4117/4128/4115/4116 OR QQ-A-200/8 OR AMS-QQ- A-200/8 OR AMS 4160 OR ASTM B211 OR ASTM B221 receive ft	Firmed	-	8/31/18	12 ft	0 ft	12 ft	\$17.80/ft	\$213.60

Plex 8/24/18 10:28 AM dart.lavoie.chantal

Items												
Line Item	Job	Part	Supplier Part No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
5		MT-O1-R2.500	TR21201	AISI O1 Tool Steel Round Bar 2.500" DIA : Material: AISI O1 TOOL STEEL ROUND BAR DIN 1.2510 or B.S. BO 1 or SAE J437 or SAE J438 or UNS T31501 or ASTM A681	Firmed	-	8/31/18	3 ft	0 ft	3 ft	\$61.20/ft	\$183.60
6		MT-O1-R3.000	TR301	AISI O1 Tool Steel Round Bar 3.000" DIA. : Material: AISI O1 TOOL STEEL ROUND BAR DIN 1.2510 or B.S. BO 1 or SAE J437 or SAE J438 or UNS T31501 or ASTM A681	Firmed	-	8/31/18	3 ft	0 ft	3 ft	\$72.53333/ft	\$217.60
											Grand Total: \$1,261.12	

Order Notes

Procurement Quality Clauses

- A005 right of entry
- A012 chemical and physical test report
- A016 personnel qualification
- A017 raw material identification (as applicable)
- A026 certification of material conformance
- A041 quality management system
- A042 dart notification by supplier
- A043 retention of quality documents
- A048 counterfeit parts avoidance, detection, mitigation and disposition program
- A049 supplier awareness

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.



Plex 8/24/18 10:28 AM dart.lavoie.chantal

METAUX SOLUTIONS INC
2625 BOUL JACQUES CARTIER EST
LONGUEUIL, QUEBEC
J4N 1L7 **Tel. : 450 641-3330**

Bid

21/08/2018

28604

Sales Rep. : J.F. TANGUAY
Reference : CHANTAL
Expiration Date : 19/11/2018

Customer : 6323336

DART AEROSPACE LTD
1270, ABERDEEN STREET
HAWKESBURY, ONTARIO
K6A 1K7

Ship To :

Same

Tel.: 1 613 632-3336

Item No.	Description	Qty	Price	Total	Tx
	***** FACTURER E-MAIL ***** SUPER IMPORTANT SUR LE PACKING SLIP INSCRIRE LES HEAT N				
SS162B4	304 SHEET .060 (16G) 5 SHEETS 48" X 96"	160	9.02	1443.20	A
SS182B4	304 SHEET .048 (18G) 4 SHEETS 48" X 96"	128	7.40	947.20	A
SF3834	304 FLA .375 X 3.000 1 X 12'	12	17.54	210.48	A
SF1264	304 FLA .500 X 6.000 1 X 72"	6	37.92	227.52	A
SF5834	304 STAINL FLA .625" X 3.00" 1 X 72"	6	69.85	419.10	A
SR583	303 ROU .625 DIA 1 X 12'	12	6.10	73.20	A
SR13	303 ROU 1.000 DIA 3 X 12'	36	9.25	333.00	A
CMS0404130	CHROM MOLLY SHEET .040" 4130N AMS 6345 1 X 36" X 72"	18	12.00	216.00	A
BRR212	BRONZE ROU 2.500 DIA 660 1 X 24"	2	194.00	388.00	A
SWT340494	SS TUB .750 X .049 304 WELDED	120	3.25	390.00	A

*** Continued on Next Page ***

METAUX SOLUTIONS INC
2625 BOUL JACQUES CARTIER EST
LONGUEUIL, QUEBEC
J4N 1L7 *Tel. : 450 641-3330*

Bid 21/08/2018 28604

Sales Rep. : J.F. TANGUAY
Reference : CHANTAL
Expiration Date : 19/11/2018

Customer : 6323336

DART AEROSPACE LTD
1270, ABERDEEN STREET
HAWKESBURY, ONTARIO
K6A 1K7

Ship To :

Same

Tel.: 1 613 632-3336

<i>Item No.</i>	<i>Description</i>	<i>Qty</i>	<i>Price</i>	<i>Total</i>	<i>Tx</i>
AF12	6 X 20' ALU FLA 1.000 X 2.000 6061-T6 3 X 12'	36	9.60	345.60	A
AF1142	ALU FLA 1.250 X 2.000 6061-T6 1 X 12'	12	16.94	203.28	A
AF14	ALU FLA 1.000 X 4.000 6061-T6 1 X 12' *** NO 1" X 3.5"	12	19.40	232.80	A
AF112212	ALU FLA 1.500 X 2.500 6061-T6 1 X 12'	12	17.80	213.60	A
ASQT111863	ALU TUB 1.00 X 1.00 X .120 ARC 5 X 21'	105	2.20	231.00	A
MR41241H	4140 HTSR ROU 4.500 DIA 1 X 36"	3	125.00	375.00	A
TR301	O-1 TFA TO FIN 3 RD 1 X 36"	64	3.40	217.60	A
TR21201	O-1 TFA TO FIN 2.500 RD 1 X 36"	54	3.40	183.60	A

	COPY	<i>Subtotal</i>	6 650.18
A) Regist :		HST :	864.52
		Total :	7 514.70

MET'ALUX SOLUTIONS INC
2625 BOUL JACQUES CARTIER EST
LONGUEUIL, QUEBEC
J4N 1L7
Tel.: 450 641-3330

Shipping Order

05/09/2018

Order : 137725
Reference : 40839
Ship : PICK UP / PICK UP

Customer: 6323336

DART AEROSPACE LTD
1270, ABERDEEN STREET
HAWKESBURY, ONTARIO
K6A 1K7

Ship To

Same

Tel.: 1 613 632-3336

Item No.	Description	Qty	Qty. Delivered	B/O Qty
	***** FACTURER E-MAIL ***** SUPER IMPORTANT SUR LE PACKING SLIP INSCRIRE LES HEAT N			
SF1264	304 FLA .500 X 6.000 1 x 72"	6	6	0
SR583	ht: 563X AT 303 ROU .625 DIA 1 x 12' *****	12	12	0
AF12	ht: 47715 AT ALU FLA 1.000 X 2.000 6061-T6 3 X 12'	36	36	0
AF112212	ht: 18019291A AT ALU FLA 1.500 X 2.500 6061-T6 1 X 12' ***	12	12	0
TR21201	HT: 3B6350 AT O-1 TFA TO FIN 2.500 RD 1 X 36" ****	51	51	0
TR301	HT: 991703650B AT O-1 TFA TO FIN 3 RD 1 X 36" HT: 9917036550B-48-4	73	73	0

SHIP JOURNEY COLLECT
JP

Shipping :
Package No :
Merchandise Received:

Ref. : 7109118

001441



Pennsylvania
289 Mifflin Drive
Wrightsville, PA 17368
USA

METALLURGICAL TEST REPORT

6870 Highway 42 East
Ghent, KY 41045-9615
(502) 347-6000

Certificate: 363734 1 Mail To:

Ship To:

Customer:

Date: 12/15/2017 Page: 1

Steel: 304/304L

Finish: I

NAS Order:

Corrosion: ASTM A262/15 A 180Bend-O

Your Order:

PRODUCT DESCRIPTION:

STAINLESS STEEL PLATE, HRAP; UNS 30400/30403
ASTM A240/16A, A480/16B, A666/15; ASME SA240/15, SA480/15, SA666/15
CHEM ONLY ON FOLLOWING ASTM: A276/17, A479/17, A484/16, A312/16
AMS 5511B/5513J XMRK; MIL-S-5059D AND3 (X CRN MEAS); MIL-S-4043B
NACE MR0175/ISO 15156-3:2009 A, MR0103/07:QCS766D-A X MAG PERM
MIN. SOLUTION ANNEAL TEMP 1900F, WATER QUENCHED
SAB AMS QQ-S-763

REMARKS:

Mat'l is Free of Mercury Contamination. No weld repairs.
EN 10204:2004 3.1; RoHS 1 & 2 Compliant
Material is Free of Radioactive Contamination
Steel Making Process: EAF, AOD, & Cont. Casting
Product Mfg. by a Quality Mgt. Sys. in Conf. w/ISO 9001
*Melted & Manufactured in the USA; Mat'l is DPARS Compliant

Product Id	Plate#	Skid #	Thickness	Width	Weight	Length	Mark	Pieces	Commodity Code
06563X BA	06563X BA	PK4068	.5000	60.0000	1.260	PLATE	144.00	3	1

CHEMICAL ANALYSIS CM(Country of Melt) ES(Spain) US(United States) ZA(South Africa) JP(Japan) Lab Accreditation Bureau, ISO/IEC 17025, Certificate# L2323
HEAT 563X CM C % CR % CU % MN % MO % N % NI % P % S % Chemical Analysis per ASTM A751/14a

US .0145 18.0665 .3940 1.8620 .3750 .0832 8.0730 .0315 .0010

SI %

.2840

MECHANICAL PROPERTIES

Product Id#	Plate#	1 d C F	UTS KSI	20C KSI	.2% YS KSI	20C KSI	ELONG % 2"	Hard RB	R of A %
06563X BA	06563X BA	F T	83.61	36.61	62.10	70.00	72.20		

NAS hereby certifies that the analysis on this certification is correct. Based upon the results and the accuracy of the test methods used, the material meets the specifications stated. These results relate only to the items tested and this report cannot be reproduced, except in its entirety, without the written approval of NAS.

Technical
Dept. Mgr.

KRIS LARK

12/15/2017

SPECIFICATION CONTROL DRAWING

△ PURCHASE MATERIAL: AISI 304/316 SS BAR OR AISI 304/316 SS PLATE
(NOTE: AISI 303 NOT ACCEPTABLE)

△ SPECIFICATION:
PART NUMBER: M304B | T.TTT | X | WW.WWW |
| THICK | | WIDTH |

WHERE "T.TTT" = THICKNESS IN INCHES
AND "WW.WWW" = WIDTH IN INCHES

△ EG 0.5" x 3.0" BAR = M304B0.500X03.000
EG 0.5" X 12.0" PLATE = M304B0.500X12.000

RELEASED
2010-11-30

C	ADDED PLATE TO PURCHASE MATERIAL. ADDED PLATE RELATED SPECIFICATIONS, AND EG, CHANGED TITLE FROM "304/316 BAR" TO "304/316 BAR/PLATE"	MB	10.11.25
B	REFORMAT DWG. A100 SPECS (2N D6-1). REF PAR 08-020A	CP	09.07.15
A	NEW ISSUE	PH	05.08.10
REV	DESCRIPTION	BY	DATE
DESIGN	PH		
DRAWN	5		
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	10.11.25		
DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA			
DRAWING NO. M304B		REV. C	
TITLE 304/316 BAR/PLATE		SHEET 1 OF 1	
SCALE NTS		NTS	
COPYRIGHT © 2005 BY DART AEROSPACE LTD			

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M304B0.500 x 6.000
 DATE: 18/09/28

PO / BATCH NO.: P0040839 / S114510

MATERIAL CERT REC'D: Yes
 QUANTITY RECEIVED: 6 Pk
 QUANTITY INSPECTED: 6 Pk
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 0.500"
 THICKNESS RECEIVED: 0.500"
 SHEET SIZE ORDERED: —
 SHEET SIZE RECEIVED: —

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y <input checked="" type="checkbox"/> N	
CORRECT FINISH	Y <input checked="" type="checkbox"/> N	
CORROSION	Y <input checked="" type="checkbox"/> N	
CORRECT GRAIN DIRECTION	Y <input checked="" type="checkbox"/> N	
CORRECT MATERIAL PER M-DRAWING	Y <input checked="" type="checkbox"/> N	ASTM A240
CORRECT THICKNESS	Y <input checked="" type="checkbox"/> N	
PHOTO REQUIRED	Y <input checked="" type="checkbox"/> N	
CORRECT REF # TO LINK CERT	Y <input checked="" type="checkbox"/> N	MT: S63X
CORRECT MATERIAL IDENTIFICATION	Y <input checked="" type="checkbox"/> N	
CORRECT M# ON THE MATERIAL	Y <input checked="" type="checkbox"/> N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y <input checked="" type="checkbox"/> N	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y <input checked="" type="checkbox"/> N	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)	
INSPECTED BY: <u>AT</u>	SIGNED OFF BY: _____		
DATE: <u>18/09/28</u>	DATE: _____		

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

VIRAJ PROFILES LIMITED

Works: SURVEY NO.- 25/1, 25/2, 26 & 34, Village- MAAN, Taluka- PALGHAR, Dist.- THANE, MAHARASHTRA -401 506, INDIA,
e-mail- virajpo@viraj.com



TEST CERTIFICATE

CUSTOMER

ORDER NO

P006028

PACKING LIST NO

6475012215/14

INSPECTION NO

100009282788

DATE

20.11.2017

GRADE

T-303

HEAT No

47715

BUNDLE NO :

1100799336, 1100799335, 1100799334.

DESCRIPTION

STAINLESS STEEL BRIGHT BARS

COLD DRAWN POLISHED - 2H

SIZE	SHAPE	TOLERANCE	LENGTH	PIECES	WEIGHT
3/4"	ROUND	ASTM A404	12'-14'	27	11500 LB

CHEMICAL ANALYSIS

%C	%Mn	%Ni	%S	%P	%Cr	%Nb	%Cu	%Mo	%Co	%N
0.030	1.970	0.300	0.2800	0.0340	17.360	0.440	0.400	0.290	0.190	0.0100

TEST RESULTS

0.2% yield strength ksi	Tensile Strength ksi	Elongation %	Reduction Of Area %	Hardness HEN	Grain Size NOS
91.0	165.0	39.0	36.0	216.0	7.0

SPECIFICATION:

MATERIAL CONFORMS TO DIN 1629-3.085 COND-A & ASTM A304/A304M-12a, ASTM A 304-04, ASTM A404-04AMS 304H/ TYPE L, EXCEPT MARKING, Q35-36/042 COND A, EXCEPT MARKING, UNS-S-30403, ASTM A304-0002, ASTM A304/A304M-12a, SUP CLASS L AMS SA 304 SUP CLJ MIL-S-9012 B GRADE AISI 304 & UNS 304.

CERTIFIED AS PER EN 10204-3.1

REMARKS

MATERIAL IS FREE FROM MERCURY CONTAMINATION, FREE FROM WELD OR WELD REPAIRS, MICROFREE FROM CONTINUOUS CARBIDE NETWORK ON GRAIN BOUNDARIES. MACRO-GOOD, MINIMUM SOLUTION ANNEALING TEMPERATURE 1050C, SOAKING TIME 1/2 HR, WATER QUENCHED. MELT SOURCE/AGE. WE CONFIRM THAT THE MATERIAL HAS BEEN TESTED AND FOUND TO BE FREE FROM RADIOACTIVE CONTAMINATION. COUNTRY OF ORIGIN: INDIA.

We hereby certify that the material described above has been tested and complies with the terms of order/contract.

P. R. MURTHY
WORKS ENGINEER

SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL: AISI 303 SS ROUND BAR
(NOTE: AISI 304/316 NOT ACCEPTABLE)

SPECIFICATION:

PART NUMBER: M303R/D.DDD
DIA.

WHERE "D.DDD" = DIAMETER IN INCHES
EG. 0.75" ROUND BAR = M303R0.750

RELEASED
2010-02-02
JMP

B	REFORMAT DWG. ADD SPECS (ZN D8-1)	CP	10.01.05
A	NEW ISSUE	DS	01.12.20
REV.	DESCRIPTION	BY	DATE
DESIGN			
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	10.01.05		
DART AEROSPACE LTD HAYKESBURY, ONTARIO, CANADA			
DRAWING NO. M303R			
REV. B			
SHEET 1 OF 1			
TITLE 303 ROUND BAR			
SCALE NTS			
DATE 10.01.05			
COPYRIGHT © 2001 BY DART AEROSPACE LTD			
NOT TO BE USED FOR ANY OTHER PURPOSE WITHOUT WRITTEN PERMISSION			

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M303R0.625
 DATE: 18/09/10

PO / BATCH NO.: P040839/S108976

MATERIAL CERT REC'D: Yes
 QUANTITY RECEIVED: 12ft
 QUANTITY INSPECTED: 12ft
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 0.625"
 THICKNESS RECEIVED: 0.625"
 SHEET SIZE ORDERED: —
 SHEET SIZE RECEIVED: —

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y (N)	
CORRECT FINISH	(Y) N	
CORROSION	Y (N)	
CORRECT GRAIN DIRECTION	(Y) N	
CORRECT MATERIAL PER M-DRAWING	(Y) N	ASTM A582
CORRECT THICKNESS	(Y) N	
PHOTO REQUIRED	Y (N)	
CORRECT REF # TO LINK CERT	(Y) N	HT: 47715
CORRECT MATERIAL IDENTIFICATION	(Y) N	
CORRECT M# ON THE MATERIAL	(Y) N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y (N)	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y (N)	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
TYPE OF MATERIAL	HRC	HRB	DUR A	DUR D	WEBSTER
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>AT</u> DATE: <u>18/09/10</u>	SIGNED OFF BY: _____ DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in



BON DE LIVRAISON

TÉLÉPHONE: (418) 831-4444
TÉLÉCOPIEUR: (418) 831-7400
SANS FRAIS: (800) 704-4244
770, Chemin Olivier, Lévis, Québec G7A 2N2

NO DU BON	DATE DE LIVRAISON
127404	13/Feb/18
NR: R-015478-2	NO DE TELEPHONE DU CLIENT: 450-963-3693
NO COMMANDE CLIENT: PAJ-50111	REPRÉSENTANT: Guillaume Morin
CHAUFFEUR: JP COMEAU	NO COMMANDE EXTRUDEX: 109487

VENDU A

NO CLIENT: 3693

LIVRÉ À

NO CLIENT: L-3693

NO ITEM	NO DE FILIERE	NO PIÈCE CLIENT	DESCRIPTION ALLIAGE / TRAITEMENT	LONGUEUR	FINITION	COMMANDE CLIENT	NB PIÈCES	KILOS	A VENIR	NO TICKET	EN LIVRAISON	%	OK
15	SO11570		BARRE PLATE 2" X 1" 6061/T6	6096mm	NATUREL MILL	24	500		NB PIÈCES	NO PIÈCES	NB PIÈCES		
									0	0	27	573	
									109487-15-1A1	425920	27	573	100.0%
									Sous-Total:	1	27	573	

3 MILL TEST + CERT. CONFORMITE

Mill Test (Tensile Properties of Aluminum)

Test Date.: 9/Feb/18

Order No.	Alloy	Temper	Yield (ksi)	Ultimate Tensile (ksi)	Total Elongation (%)	Hardness (Rockwell E)	Conductivity %	Report No.
109487-15-1A1	6061	T6	35.5	39.0	12.80	86.80		8806

Certificate of compliance (Certificat de conformité)

Normes: (ANSI H35.1-1997) & (ASTM B221)

Order No. Hardness (Webster) #1 #2 Cast No. CAST CHEMICAL COMPOSITION:

109487-15-1A	18019291A	Al	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ga	V	R	Zr	Ri	Pb	Sn	Sr	Co
		98.18	0.54	0.17	0.21	0.01	0.80	0.08	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

NORM
13 FEB. 2018

13 FEB 2018

SIGNATURE
EXTRUDEX:

SIGNATURE
CLIENT:

DATE:

13

SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL: 6061-T6 T651/T6510/T6511/T62 ALUMINUM BAR

SPECIFICATION: QQ-A-225/8 OR AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116)
OR QQ-A-200/8 OR AMS-QQ-A-200/8 (OR AMS 4160)
OR ASTM B211 OR ASTM B221

PART NUMBER: M6061T6B T.TTT X WW.WWW
THICK WIDTH

WHERE "T.TTT" = THICKNESS IN INCHES
"WW.WWW" = WIDTH IN INCHES

E.G. 1.0" X 12.0" BAR = M6061T6B1.000X12.000

RELEASED
2009-05-02
MAD

B	REMOVE QQ-A-250/11 OPTION, REFORMAT NOTES, ADD ASTM B211/B221 (Zn 07-1)	CP	09.07.13
A	NEW ISSUE	DS	01.06.08
REV.	DESCRIPTION	BY	DATE
DESIGN	DS		
DRAWN	DS		
CHECKED	DS		
MFG. APPR.	M6061T6B		
APPROVED	TITLE		
DE APPR.	6061-T6 BAR		
DATE	09.07.13		
DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA REV. B DRAWING NO. M6061T6B SHEET 1 OF 1 SCALE NTS COPYRIGHT © 2001 BY DART AEROSPACE LTD ALL RIGHTS RESERVED. NO PART OF THIS DOCUMENT MAY BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, WITHOUT PERMISSION IN WRITING.			

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M6061T6B1.000 x 02.000

PO / BATCH NO.: P0040839/S108977

DATE: 18/09/10

MATERIAL CERT REC'D: Yes

THICKNESS ORDERED: 1.000"

QUANTITY RECEIVED: 36ft

THICKNESS RECEIVED: 1.000"

QUANTITY INSPECTED: 36ft

SHEET SIZE ORDERED: —

QUANTITY REJECTED: 0

SHEET SIZE RECEIVED: —

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y (N)	
CORRECT FINISH	(Y) N	
CORROSION	Y (N)	
CORRECT GRAIN DIRECTION	(Y) N	
CORRECT MATERIAL PER M-DRAWING	(Y) N	ASTM B221
CORRECT THICKNESS	(Y) N	
PHOTO REQUIRED	Y (N)	
CORRECT REF # TO LINK CERT	(Y) N	HT: 18019291A
CORRECT MATERIAL IDENTIFICATION	(Y) N	
CORRECT M# ON THE MATERIAL	(Y) N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y (N)	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y (N)	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>AT</u>	SIGNED OFF BY: _____
DATE: <u>18/09/10</u>	DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in



TEL: (416)745-4444 FAX: (416)745-0925 1-800-668-7210
411 CHRISLEA ROAD, WOODBRIDGE, ONTARIO, CANADA L4L 8N4
<http://www.extrudex.com>

MILL TEST

SO DESCRIPTION 2.5 x 1.5 FB	CERT CODE: 9	DIE NUMBER S 4660	DATE OF SHIPMENT Oct/19/2017	EXTRUDEX ORDER NO. 210182 - 9	MANIFEST NO. 379633
	CUSTOMER PO C74902	ALLOY 6061	TEMPER T6511	SALESMAN HOUSE ACCOUNTS	MADE IN CANADA
	CUSTOMER PART NUMBER V836661	PART DESCRIPTION 2.5 x 1.5 FB	CERTIFICATION ASTM B221-14 - AMS QQA 200/8		

Mechanical Properties

Lot	Alloy	Test Date	Ultimate Tensile Strength (KSI)	Yield Strength (KSI)	Percent Elongation	Hardness Rockwell F	Conductivity
A.11	6061	Oct/13/2017	42.30	38.40	12.80	89.0, 89.2, 89.5	

Chemical Composition

Cast Number	Lot	Alloy	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ga	V	B	Zr	Pb	Sn	Sr	Co	Al	Other
386350	A.11	6061	0.6	0.15	0.21	0.04	0.87	0.07	0	0.01	0.02	0	0	0	0	0	0	0	0	0	0

We certify that the following extrusions have been quality inspected/tested and conforms to required dimensional and temper specifications.

T. Mohabir

Tulsiram Mohabir
Quality Control Manager

SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR

SPECIFICATION:
 QQ-A-225/8 OR AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116)
 OR QQ-A-200/8 OR AMS-QQ-A-200/8 (OR AMS 4160)
 OR ASTM B211 OR ASTM B221

PART NUMBER: M6061T6B | T.TTT | X | WW.WWW
 THICK | WIDTH

WHERE "T.TTT" = THICKNESS IN INCHES
 "WW.WWW" = WIDTH IN INCHES

E.G. 1.0" X 12.0" BAR = M6061T6B1.000X12.000

RELEASED
 2009-08-03
MP

B	REMOVE QQ-A-225/81 OPTION, REFORMAT NOTES, ADD ASTM B211B221 (2N D7-1)	CP	09 07 13
A	NEW ISSUE	DS	01 06 08
REV.	DESCRIPTION	BY	DATE
DESIGN	DS		
DRAWN			
CHECKED	<i>AS</i>		
MFG. APPR.	M6061T6B		
APPROVED			
DE APPR.			
DATE	09.07.13		

DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWING NO.	REV. B
M6061T6B	SHEET 1 OF 1
TITLE	SCALE
6061-T6 BAR	NTS
COPYRIGHT © 2001 BY DART AEROSPACE LTD. ALL RIGHTS RESERVED. NO PART OF THIS DRAWING OR SPECIFICATION MAY BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM.	

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M6061T6B2.500x01.500

PO / BATCH NO.: P0040839 / S108978

DATE: 18/09/10

MATERIAL CERT REC'D: Yes

THICKNESS ORDERED: 1.500"

QUANTITY RECEIVED: 11.4729 ft

THICKNESS RECEIVED: 1.500"

QUANTITY INSPECTED: 11.4729 ft

SHEET SIZE ORDERED: —

QUANTITY REJECTED: 0

SHEET SIZE RECEIVED: —

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y (N)	
CORRECT FINISH	Y (N)	
CORROSION	Y (N)	
CORRECT GRAIN DIRECTION	Y (N)	
CORRECT MATERIAL PER M-DRAWING	Y (N)	ASTM B221
CORRECT THICKNESS	Y (N)	
PHOTO REQUIRED	Y (N)	
CORRECT REF # TO LINK CERT	Y (N)	HT: 386350
CORRECT MATERIAL IDENTIFICATION	Y (N)	
CORRECT M# ON THE MATERIAL	Y (N)	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y (N)	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y (N)	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>AT</u>	SIGNED OFF BY: _____
DATE: <u>18/09/10</u>	DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

Chemical certification
Certification chimique

Order Num / No. Commande 45354	Vendor / Fournisseur 51	Country of origin / Pay d'origine CHINA	Date 01/18/18	Heat / coulée 991703660B	Material ID # / No. matière
Grade / Nuance 01	Conditions ANNEALED; EAF+LF+VOD				
Shape / Forme ROUND	Size / Dimension 2.500	Specifications ASTM A-681-08, ASTM-A-800-08			

Chemical composition / Analyse chimique

Carbon (C)		Silicon (Si)		Manganese (Mn)		Phosphorus (P)	
Mini / maxi	0.8500 / 1.0500	Mini / maxi	0.1000 / 0.3500	Mini / maxi	1.0000 / 1.4000	Mini / maxi	0.0000 / 0.0350
Actual %	0.920	Actual %	0.220	Actual %	1.060	Actual %	0.022
Sulphur (S)		Chromium (Cr)		Nickel (Ni)		Molybdenum (Mo)	
Mini / maxi	0.0000 / 0.0350	Mini / maxi	0.4000 / 0.7000	Mini / maxi	0.0000 / 0.4000	Mini / maxi	0.0000 / 0.2500
Actual %	0.000	Actual %	0.000	Actual %	0.000	Actual %	0.000
Copper (Cu)		Vanadium (V)		Aluminum (Al)		Tungsten (W)	
Mini / maxi	0.0000 / 0.3000	Mini / maxi	0.0000 / 0.3000	Mini / maxi	0.0000 / 0.0800	Mini / maxi	0.4000 / 0.7000
Actual %	0.000	Actual %	0.000	Actual %	0.000	Actual %	0.510
Cobalt (Co)		Titanium (Ti)					
Mini / maxi	0.0000 / 0.0200	Mini / maxi	0.0000 / 0.0000	Mini / maxi	0.0000 / 0.0000	Mini / maxi	0.0000 / 0.0000
Actual %	0.000	Actual %	0.000	Actual %	0.000	Actual %	0.000
Mechanical properties / Propriétés Mécaniques							
Yield strength / Élasticité		Tensile / Rés. à la traction		Elongation / Allon. (%)		Red. of area / Surface (%)	
0.000	PSI	0.000	PSI	0.00		0.00	
						RC	Surface Hd / Dureté
							203 BHN

Note:

We certify that the above data has been verified and are conform to an original mill or supplier certificate supplied to us with the material

Nous certifions que les données ci haut ont été vérifiées et sont conformes d'après un certificat original qui nous a été fourni par notre fournisseur.

MS

Prepared by: / Préparé par:

SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL: AISI O1 TOOL STEEL ROUND BAR

SPECIFICATION:

DIN 1.2510 or B.S. BO 1 or
SAE J437 or SAE J438
or UNS T31501 or ASTM A681

PART NUMBER:

MT-O1-R [D.DDD]
WHERE "D.DDD" = DIAMETER IN INCHES
EG. 5/8" ROUND BAR = MT-O1-R0.625

REV	DESCRIPTION	DATE	BY	APPROVED
A	NEW ISSUE	17.08.09	VM	WM

DART AEROSPACE		Hamilton, Ontario, Canada	
AISI O1 TOOL STEEL ROUND BAR			
DWS NO.		REV	
DESIGN BY: VM 8/9/2017		A	
DRAWN BY: VM 08/31/2017		X	
CHECKED: SAC 08/31/2017		X	
MFG. APPR: DP 09/05/2017		X	
QA APPR: PD 09/12/2017		X	
APPROVED: VM 09/12/2017		X	
DATE: 8/31/2017		SCALE: NTS WEIGHT N/A LBS	
SHEET 1 OF 1		SHEET 1 OF 1	
COPYRIGHT © 2017 BY DART AEROSPACE LTD.			
THIS DRAWING IS THE PROPERTY OF DART AEROSPACE LTD. IT IS TO BE USED FOR THE PURPOSES SPECIFIED IN THE ORDER ONLY. IT IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF DART AEROSPACE LTD.			

EN 17-149

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: MT-01-R2500
 DATE: 18/09/10

PO / BATCH NO.: P0040839/S108979

MATERIAL CERT REC'D: Yes
 QUANTITY RECEIVED: 3ft
 QUANTITY INSPECTED: 3ft
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 2.500"
 THICKNESS RECEIVED: 2.500"
 SHEET SIZE ORDERED: —
 SHEET SIZE RECEIVED: —

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y <input checked="" type="radio"/> N	
CORRECT FINISH	<input checked="" type="radio"/> Y N	
CORROSION	Y <input checked="" type="radio"/> N	
CORRECT GRAIN DIRECTION	<input checked="" type="radio"/> Y N	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="radio"/> Y N	ASTM A681
CORRECT THICKNESS	<input checked="" type="radio"/> Y N	
PHOTO REQUIRED	Y <input checked="" type="radio"/> N	
CORRECT REF # TO LINK CERT	<input checked="" type="radio"/> Y N	MT: 991703650B
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="radio"/> Y N	
CORRECT M# ON THE MATERIAL	<input checked="" type="radio"/> Y N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y <input checked="" type="radio"/> N	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y <input checked="" type="radio"/> N	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>AT</u>	SIGNED OFF BY: _____
DATE: <u>18/09/28</u>	DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in